DTS 101 – Evolution of the Defense Travel System – 1 August 2006

Over the last two years there have been several articles and reports written about the Defense Travel System, several of which have attacked the Program Management Office for DTS (PMO-DTS) and the system's prime contractor, Northrop Grumman Mission Systems (NGMS). Much of the information used in these articles and reports is outdated, uninformed, sometimes erroneous, sometimes taken out of context and often results in faulty conclusions derived from these and other questionable sources. Here is "the rest of the story."

To understand DTS, one must first understand the Department's old travel environment and how DTS evolved to what it is envisioned to be today.

The DOD travel environment was not designed to be an integrated system, nor is it treated as such. Policy for temporary duty travel (TDY) emanates from three different DOD staff agencies: the Under Secretary of Defense for Acquisition, Technology and Logistics (USD (AT&L)) is responsible for policy on use of commercial and government transportation; the Under Secretary of Defense Comptroller (USD (C)) is responsible for policy on payments for authorized travel expenses incurred in connection with TDY travel; and the Under Secretary of Defense for Personnel and Readiness (USD (P&R)) is responsible for policy on TDY travel entitlements. While the travel management policies issued by these three staff elements are closely interrelated, policy formulation and implementation are sometimes done in isolation. This separation results in a stovepipe travel process with no one office in DOD having responsibility for the system. In addition, DOD components often supplement the Joint Federal Travel Regulations (JFTR) and the Joint Travel Regulations (JTR). The overall results are non-uniform treatment of travelers and non-uniformity in policy application. In short, the travel system is grossly complex and confusing.

In 1995, the Reengineering Travel Transition Office (RTTO) Task Force determined that there were multiple factors complicating the legacy travel system and making the travel process less than responsive to mission needs. The Task Force identified seven critical factors undermining the current system. They include: complex statutory and regulatory controls; fragmented elements within the travel system; overly complex and inconsistent business practices; administrative rules focused on stovepipe procedures with no single agency charged with responsibility for total system costs; lack of trust within the system; lack of customer orientation and customer focus; and lack of training and education at all levels. Analysis of DOD's stovepiped manual travel processes showed that automation and process reengineering would save the Department tremendous amounts of overhead, plus improve "quality of life" by speeding reimbursement times.

In response to findings of the RTTO Task Force, the DTS was conceived and the PMO-DTS was established in late 1995. Acquisition of the DTS proceeded as an OSD-sponsored Special Interest Initiative as part of Vice President Gore's Reinventing Government initiative. In 1996, alternatives for satisfying mission needs were analyzed and twenty-seven pilot "proof of concept" sites across DOD validated the DTS concept.

DOD adopted a “clean sheet of paper” approach to reengineering travel, related financial processes, and document archiving. The Military Services and major Defense Agencies jointly worked to overhaul the Department’s business/operational travel and related processes, as well to simplify business travel entitlements. The DTS end-to-end functional architecture was subsequently developed to support the reengineered DOD processes and achieve a standardized DOD-wide business process and architecture that integrated this complex set of interacting pieces into a unified whole.

Substantial technical and cultural changes were required to implement DOD’s envisioned end-to-end system. Some larger US corporations had developed their own travel and accounting systems that resembled portions of the DTS, but DOD’s concept exceeded the scope and scale of what was then available in the private or public sector.

To help reduce costs and avoid lengthy government system development efforts, DOD’s strategy was to procure a modified commercial off the shelf (COTS) travel authorization and voucher computation system (TAVS). The challenge with implementing DTS was to migrate a core COTS local area network travel system to a worldwide Internet-based system, seamlessly linked to the DOD Public Key Infrastructure (PKI) for information system security and the Department’s existing accounting, disbursing, and archiving systems. The desired commercial TAVS was never intended to function independently of DOD systems.

In 1997, the DTS Program Management Office, working toward the goal of implementing the envisioned end-to-end DTS business processes and architecture, issued a Request for Proposal (RFP) for a best value travel authorization, commercial travel systems interface, voucher processing, and budget tracking system. Two responsive offers were received, and an eight-year contract (five-year base with three one-year renewal options) was awarded in 1998 to BDM. BDM was later acquired by TRW, which was subsequently acquired by Northrop Grumman Mission Systems (NGMS) in 2002.

This eight-year contract, including options, required Northrop Grumman to provide the travel authorization, reservation and booking interfaces (which function in accordance with Federal travel policy), and voucher computation portions of the DOD end-to-end system. This was a requirements contract with no established ceiling amount. Payment was based on the number of users migrated into the system and the frequency with which the system was used to process travel vouchers. Consequently, although there were fixed prices for certain contract line item numbers, the exact overall cost of the contract was unknown and could only be estimated. The often-quoted $263.7M figure for this contract was simply an estimate, made on the assumptions that all DOD two-way systems interfaces could be developed in a timely manner, that the contractor could perform necessary modifications to the TAVS core, and that the end-to-end DTS could be fielded throughout DOD under a very aggressive schedule.

Although DOD's RFP contained best-case notional schedules for testing and deployment of DTS, these timelines were dependent on the multiple factors mentioned above. Both parties acknowledged this fact in the accepted proposal, which also recognized that the deployment schedule was subject to change.

The original accepted proposal contained client-server, legacy character-based, and web browser DTS access options. At the time of award, the more prevalent, more mature technology was client-server, and the initial versions of DTS most frequently used this mode. However, both parties agreed that DTS should eventually migrate from character-based and client-server architectures to a more capable and robust web-based system.

DOD's execution of its responsibility for developing the interfaces with the DOD PKI, financial management and other necessary systems proved to be more challenging and time consuming than expected. In addition, unique Department of Defense requirements necessitated significant modifications to the COTS core, which required Northrop Grumman to extensively modify the accepted system at its own expense while earning little transaction volume-based revenue. However, Northrop Grumman's iterative core software releases and system enhancements produced a functional client-server based system as required by the contract.

In acknowledgement of the more challenging developmental nature of the project, and the requirement for and complexity of establishing successful interfaces with essential Department systems, the government restructured its contract with NGMS in early 2002 without altering the September 2006 end date. The contract restructure did not alter the relative risk between the Department and NGMS and the Government acquired increased rights to the developed software. Most importantly, the estimated $263.7M cost of the NGMS contract remained unchanged.

The DOD Inspector General (DOD IG) initiated a review of the DTS in early 2002. As pointed out in the Management Response comments, the IG report confused the estimated total end-to-end DTS costs with the NGMS contract cost. The estimated total program cost for DTS of $491.7M through FY2006 includes the front and back end systems architecture and infrastructure, as well as the costs of administering, training, and fielding the system. These are costs for which the government is directly responsible and are not included as part of the Northrop Grumman developmental contract. Subsequent to the DOD IG report, the estimated total program costs for DTS were reduced to approximately $474M in anticipation of additional savings to be accrued from the introduction of enhanced DTS functionalities. This estimate became the Acquisition Program Baseline (APB) for the DTS program.

The Department leadership did concur with the DOD IG recommendation to provide additional program oversight, and in fact was already moving in that direction prior to the IG beginning its inquiry. Two months prior to the publication of the IG report, DOD classified the DTS as a Major Automated Information System (MAIS) Acquisition

Category 1AM. Under this designation, the Milestone C decision authority (go/no go for deployment) is the Chief Information Officer (CIO) of DOD, which is the Assistant Secretary of Defense for Networks and Information Integration (ASD (NII)). During the pre-milestone C process, the DTS was put through the appropriate additional documentation, test, costing, and validation review steps. In addition, all follow-on DOD acquisition oversight processes were put in place to ensure compliance with all contract requirements. Additionally, DTS was reviewed by the DOD Business Management Modernization Program (BMMP) program office and was certified as fully compliant with the DOD Business Management Enterprise Architecture.

DTS achieved full web-based functionality in early 2003. Concurrently, a memorandum, jointly signed on 24 February 2003 by USD(C), USD (AT&L) and Assistant Secretary of Defense, Command, Control, Communications, and Intelligence (ASD (C3I)) (now ASD (NII)), designated the Defense Finance and Accounting Service (DFAS) the Lead Component for acquisition of DTS. This memo also established DFAS as the Designated Approving Authority (DAA) for DTS system security certification and accreditation. On 26 June 2003, DFAS Director, Information, and Technology, in accordance with DOD Instruction 5200.40 and DFAS Regulation 8000.1-R, granted full authority to operate the DTS Enhanced Jefferson (EJ) software release. In October 2003 the Information Technology Acquisition Board (ITAB) agreed that DTS should enter the Production and Deployment phase of the acquisition lifecycle. This Milestone C decision authorizing full-scale deployment across the Department was finalized in December 2003 and served to focus deployment of DTS to approximately 250 high-volume TDY travel sites across the department. Deployment to these sites will result DTS being used to accommodate about eighty percent (80%) of DOD's TDY travel.

On 19 April 2005, the new and more robust Madison software release replaced the Enhanced Jefferson software. Transition to the Madison software was accomplished in a series of carefully planned and orchestrated events, which included taking the system totally off line for three days to complete the final conversion. However, impact on DOD travelers was minimized because of advance notification, coordination and preparation. The Madison release automated most of the business travel situations within the Department and was the fourth of the original six planned major software releases, all named for United States Presidents, that are part of the spiral development of DTS.

The Monroe Release was introduced into the production environment on 2 April 2006 and significantly upgraded system usability, improved user friendliness and added yet more functionality. With the Monroe release, DTS now contains over six million source lines of code and is linked to 40 partner systems, to include 29 different financial systems, throughout DOD. Functionalities enhanced by Monroe include: improved Lines of Accounting (LOA) management; redesigned Budget Module to improve usability; new "Return to List" navigation button to simplify review of multiple documents; improved Group Travel processing; new Constructive Travel process to facilitate transportation calculations and allow Authorizing Officials (AO) to impose reimbursement limits; improved Personal Leave on Travel functionality; improved

accountability for Foreign Military Sales (FMS) funded travel; improved system audits; and enhanced Defense Travel Administrator (DTA) maintenance features.

On 20 April 2006 the Monroe debt management functionality was released, greatly simplifying and enhancing the ability of the Debt Management Monitor (DMM) to accomplish its functions. This release activated the Debt Management Gateway, which allows for recording due process, waivers, initiating payroll collections and collections for out-of-service debt situations. It initiated automated accounts receivable transactions to accounting interfaces for tracking of debt management transactions for the financial community, and initiated automated transmission of the advice of collection debt to the individual to inform the traveler that a debt is fulfilled.

As of 1 August 2006 DTS is deployed to over 8,500 sites worldwide (69%), to include 268 (95%) high-travel volume/high visibility sites, with more sites coming on line every month. The PMO expects to achieve Full Operational Capability (FOC) by the end of FY 2006, with the PMO deploying the remainder of the 281 high-travel volume/high visibility sites and the Service and Agency components responsible for deploying the remainder of the approximately 12,000 total DOD sites.

As of 1 August 2006 DTS has processed almost 2.4 million approved authorizations and almost 2.0 million approved vouchers. On average, DTS is now processing over 13,000 transactions per day. There is a significant cost savings on just vouchers alone processed in DTS compared to vouchers traditionally computed and paid by DFAS (projected to be approximately $18 per voucher in the steady state (beyond FY2007).) Over 1.1 million personnel are signed up to use DTS and more users are self-registering every day. The number of personnel signed up to use DTS for travel does not include other key DTS users…Authorizing and Approving Officials (AO), Defense Travel Administrators (DTA), Centrally Billed Account (CBA) personnel, and other process owners who are also using DTS every day to support and manage the travel process. This is a key point, because DTS is important not only to the traveler, but also to commanders, managers and process owners. It is in this regard, too, that DTS differs significantly from the GSA eGov Travel Service (ETS). DTS is an end-to-end financial management system that also provides an automated travel reservation service.

When fully deployed, DTS will be available to support over 3.2 million military and DOD civilian personnel making approximately 5.6 million trips annually. The DTS endstate will be characterized by the following desirable attributes:

- Single, uniform, automated, web-based solution for DOD TDY (official business) travel
- Improved mission and user support
- Reduced DOD cost for TDY travel
- Automated TDY voucher processing, computation of entitlements, and pay
- Automated centrally billed account (CBA) reconciliation

- Electronic records management and archival
- Reengineered Commercial Travel Office (CTO) acquisition

In summary, DTS provides a secure, end-to-end, web-based, electronic financial management system that automates the Department's TDY business travel process. It leverages commercial travel management products, accelerates travel processing, reduces costs, incorporates Public Key Infrastructure (PKI) and digital signature, includes electronic commerce/electronic data interchange (EC/EDI), provides superior customer service, and it meets operational requirements for a single, paperless TDY travel system, available to users 24 hours a day, seven days a week. When completely fielded, DTS will eliminate over 50% of the process steps necessary for TDY travel and reimbursement. It replaces manual administration with automated solutions, frustration with user-friendliness, costliness with economy, and mission diversion with mission focus. In short, DTS makes the TDY process quicker, easier and better for all involved.